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Application No. 10/750,481
Amendment dated November 29, 2006
Reply to Office Action of October 4, 2006

Docket No.: 30320/15126

REMARKS

Claims 1 and 3 – 20 are pending and at issue. The official action rejects claims 1, 3 – 8, 11 – 14, 16 and 17 under 35 U.S.C. §102(b) as anticipated by *Jin* (U.S. Publication No. 2002/0054614). The action rejects claims 9 and 10 under 35 U.S.C. §103(a) as obvious over *Jin* in view of *Handa* (U.S. Patent No. 6,008,675). The action rejects claim 15 under 35 U.S.C. §103(a) as obvious over *Jin* in view of *McDonald* '239 (U.S. Publication No. 2002/0172239). The action rejects claims 18 – 20 under 35 U.S.C. §103(a) as obvious over *Jin* in view of *Handa*.

Applicant respectfully traverses these rejections and requests reconsideration.

PRIOR ART REJECTIONS

Applicant incorporates by reference the comments made in the August 23, 2006 response. Although directed to distinctions over *McDonald* '239, many of the same highlighted distinctions appear relevant in regards to the *Jin* reference. As previously stated, etalons are typically used for a two-fold purpose: 1) to establish a narrow bandwidth (transmission peak) on the output wavelength of a light source; and 2) to tune that output wavelength to the desired value by tuning the etalon's transmission peaks within the joint free spectral range. *McDonald* '239 used differential and continuous tuning techniques to achieve both functions. In response, applicant noted that the present application provides etalon configurations that are specifically designed to maintain the narrow bandwidth effect of etalon filters (1 above), but where the angular wavelength dependence (2 above) is substantially removed.

The *Jin* document, like *McDonald* '239, describes angle-based etalon tuning. Paragraph [0035] cited by the examiner, for example, clearly states that in order to tune the wavelength of the system, the etalons are "tuned by changing tilting angles." *Jin* [0035] (emphasis added). Therefore, like *McDonald* '239, *Jin* does not appear to teach or suggest a second filter element and "wherein the wavelength of the light is not tuned by simultaneous rotation of the first and second filter elements relative to the reference axis," as recited in claim 1. To the contrary, paragraph [0035] indicates that changing the tilt angle does tune the wavelength of the device.

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Furthermore, contrary to the conclusions of the action, while Figure 1 of *Jin* shows two etalons each with different orientations to an optical axis, there is nothing in *Jin* which suggests that the angles $\Theta 1$ and $\Theta 2$ substantially equal one another or that the corresponding etalons have angular sensitivities that substantially cancel one another. On the contrary, Figure 1 depicts different angles for each etalon, and different subscripts to indicate each different angle.

In any event, to expedite allowance applicant has amended the independent claims to recite a support having two side walls each with a tapering angle, and each mounted with a different filter element. As described in some examples of the application (see, e.g., FIG. 5 and corresponding descriptions), the tapering angle of a support may define the angle of incidence of light on each filter and thereby facilitate the filters having angular sensitivities that substantially cancel one another. Having a single support (such as a wedge support) for both filter elements may improve manufacturing reliability by allowing for accurate simultaneous alignment of both filter elements. Further such supports may maintain relative angular integrity between filter elements during device operation, because the support will move both filter elements simultaneously. Further still, such supports may in some examples prevent or limit relative movement between filter elements from thermal expansion, thus minimizing angular drift. Dependent claims 12, 16, and 19, for example, generally recite that the support be formed of a material having a coefficient of thermal expansion that minimizes angular drift between filter elements.

Jin clearly does not teach the recited support. The action points only to paragraph [0035] and lines 4 and 5 as teaching a support. Setting aside the fact that this paragraph merely describes the material used to form the etalons themselves not the support for the etalons, *Jin* does not describe using a single support for both etalons or using a support having two side walls each of a same or different taper angle for mounting each of the filter elements. Further there is no teaching or suggestion of forming a support of a material having a thermal conductivity that minimizes angular drift between filter elements.

Thus, *Jin* cannot be said to teach or suggest the recited subject matter, whether taken alone or in combination with any of the art of record.

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In light of the foregoing, the rejections to the pending claims are respectfully traversed. Applicant respectfully asserts that all pending claims (claims 1 and 3 – 20) are in condition for immediate allowance.

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Respectfully submitted,

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